



**NATIONWIDE CHILDREN'S**  
*When your child needs a hospital, everything matters.™*

**Helping Hand™**

*Health Education for Patients and Families*

## Feminizing Hormone Therapy

Hormone therapy can help people with gender dysphoria feel more at home in their bodies. Like other medicines, hormone therapy has benefits and risks. When taken correctly, hormone therapy can improve mental health and quality of life. Your health care team will work with you to get a personal and family medical history before you start hormone therapy. They will work with you to make sure these medicines are taken safely so you can get the greatest benefit with the least risk.

### Hormone therapy

Hormone therapy is when you take medicine to change the levels of sex hormones in your body. Changing these levels will affect your:

- breast development
- body shape changes
- hair growth
- muscle mass

Feminizing hormone therapy is used to align your gender identity and body.

### Medicines used

**Estrogen** – Estrogen is a sex hormone that causes changes in the body, such as breast growth, decreased body and facial hair growth and decreased muscle mass. You can get estrogen as an oral pill or a skin patch. Doses are different from person to person and depend on factors such as personal health and your body's response to estrogen.

**Androgen blockers** – These are medicines that block testosterone from working in your body. Taking this medicine helps suppress (lessen) male traits. You will take your androgen blocker pills by mouth. The most common androgen blocker used in our clinic is spironolactone. Spironolactone can be used alone or with estrogen. Since the changes androgen blockers cause can be reversed, this medicine is often started first.

## Changes on hormone therapy

When you take feminizing hormone therapy, changes are gradual and can continue over several years. The amount of change and time it takes varies for each person. Factors that impact this include:

- genetics
- age
- health status
- dose

Just because the changes do not happen fast, does not mean that the medicine is not working. Your health care team will work with you to make sure that doses are safe, effective and meet your goals. Many changes caused by feminizing hormone therapy can be reversed. This means if you stop taking the medicine, the changes will stop and your body will return to how it was before you started the medicine. However, there are some changes that may not be reversed. Hormone therapy may impact fertility. This is individual for each patient and will be discussed further with your healthcare team.

## How long changes take

These are average time ranges for expected onset and full effects. However, everyone's body responds to medicines in its own way.

### Estrogen

Effect	Expected Onset	Expected Maximum Effect	Can it be Reversed?
Breast growth	3-6 months	2-3 years	No
Less sex drive	1-3 months	1-2 years	Yes
Changes in skin texture	3-6 months	-	Yes
Fertility	Varies	-	Varies, long-term use can decrease fertility
Body fat redistribution	3-6 months	2-5 years	Yes
Decrease in muscle mass	3-6 months	1-2 years	Yes
Facial and body hair changes	6-12 months	>3 years	No
Emotional changes	1-3 months	-	Yes
Decreased testicular volume	3-6 months	2-3 years	Varies

\*Adapted from WPATH Guidelines

## **Androgen Blockers**

Effect	Average Timeline
Decrease in: <ul style="list-style-type: none"><li>• sex drive</li><li>• unexpected erections and sexual arousal</li><li>• ability to make sperm</li></ul>	After 1-3 months
Less body and facial hair growth	Slow changes over time
Male pattern balding	Slow changes over time
Breast growth	Slow changes over time

**\*Changes with androgen blockers can be reversed**

## **Risks**

We respect that making the decision to start hormone therapy is a complex process for you and your family. Like all medicines, there are risks connected with feminizing hormone therapy. There may also be long-term risks that are not yet known. Your health care team can help you understand all risks connected with these medicines.

- These medicines should be taken as prescribed.
- Taking more medicine than directed will not speed up the transitioning process and can increase health-related risks.
- You must have regular lab tests and follow-up visits with all members of your team to make sure you are safe.
- Not smoking lowers the risks of feminizing hormone therapy.

## **Safety**

Talk with your health care team about the risks and benefits of estrogen and androgen blockers and your goals. They will make a treatment plan just for you.